	Desc.
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EXHIBIT XIII	

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Disclaimers

PRELIMINARY - FOR DISCUSSION

The Financial Oversight and Management Board for Puerto Rico (the "Board") and Ernst & Young Puerto Rico LLC ("EY") have prepared this analysis based upon information and material supplied by the Board, Board advisors, the Government of Puerto Rico, and other publicly-available sources.

The nature and scope of EY's services were determined by the Board and are reflected in the Agreement between EY and the Board (the "Agreement"). EY's procedures were limited to the procedures requested by the Board and which are described in the Agreement. EY's work was performed only for the use and benefit of the Board and should not be used or relied on by anyone else. Other persons who read this analysis who are not a party to the Agreement do so at their own risk and are not entitled to rely on it for any purpose. EY does not assume any duty, obligation or responsibility whatsoever to any other parties that may obtain access to the analysis.

EY's services were advisory in nature. While EY's work in connection with this analysis EY did not render an assurance report or opinion under the Agreement, nor did EY's services constitute an audit, review, examination, forecast, projection or any other form of attestation as those terms are defined by the AICPA. None of the services EY provided constituted any legal opinion or advice. This analysis is not being issued in connection with any issuance of debt or other financing transaction.

The Board has the knowledge, experience and ability to form its own conclusions. Any assumptions, forecasts, projections, recommendations or conclusions contained in this analysis are solely those of the Board. The assumptions and data are consistent with those utilized by Milliman in the June 30, 2017 actuarial valuation reports with the following exceptions: Mortality projection has been updated to reflect the Society of Actuaries 2018-O2 projection scale.

In assisting in the preparation of this analysis, EY relied on information and underlying data provided by the Board, Board advisors, the Government of Puerto Rico, Milliman, or publicly-available resources, and such information was presumed to be current, accurate and complete. EY has not conducted an independent assessment or verification of the completeness, accuracy or validity of the information obtained. Consequently, EY provides no assurance of any kind with respect to, or on, the information presented.

There will usually be differences between projected and actual results because events and circumstances frequently do not occur as expected and those differences may be material. As a result, no assurance regarding the achievement of forecasted results is provided, and reliance should not be placed on any forecasted results or projects contained herein as such information is subject to material change and may not reflect actual results. EY takes no responsibility for the achievement of projected results.

This summary data and related discussions are confidential and entitled to the protection of Rule 408 of the Federal Rules of Evidence and any other applicable statutes or doctrines protecting the use or disclosure of confidential information or settlement discussions.

The use of the term reasonable does not indicate whether or not another party would have selected the same assumption or method, but rather that the selection of the assumption or method meets the Actuarial Standards of Practice and their application for the purpose being used. The use of other assumptions may also be reasonable and could produce different results.

The information this summary relies on data for plan participants as of July 1, 2016 provided by Milliman, and including identification of assumptions and summary of plan provisions in the June 30, 2017 Actuarial Valuation Reports as provided by Milliman. Further detail regarding projected baseline payments was provided by Milliman in a series of letters from December 2017, and April 2019. The accuracy of the calculations is dependent on the accuracy of the underlying data and completeness of the underlying information, including the development and assessment of demographic assumptions that are derived from plan experience. As new data becomes available, the appropriateness of the assumptions used will be continually evaluated for new and contrary evidence. The cut calculation is based on the cut outlined in the May Fiscal Plan and further elaborated on in the Explanatory Memorandum on Pension Reform dated August 4, 2017.

Projections reflect Milliman-developed ERS future retirement/withdrawal rates which are based on plan specific experience studies, modified to delay decrements at ages where participants are not entitled to a benefit. Actual decrement patterns may vary further due to changes to plan provisions or other events that would impact employer behaviors.

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We are currently basing our analysis on data as of July 1, 2016 that was received from Milliman for ERS. A fair amount of time has elapsed since July 1, 2016. Actuarial standards of practice (ASOPs) allow for rolling forward of data based on standard actuarial practices and rules of thumb, assuming that the data is considered to be materially consistent throughout the projection period. Even with clean data, the ASOPs indicate that sufficiently current data should be used for the measurement. Longer periods in which data is rolled forward introduce greater variability in the accuracy of the roll-forward. Given some of the data limitations that the systems have and on-going clean-up taking place, we understand that each year there can be significant fluctuations in the census data.

We understand that many of the aspects of the fiscal plan are estimates based on the best information available and that actual experience may differ from assumed. We are using the most current data available to use for our analysis and therefore it represents our current best estimate. However, updated census data will most likely produce difference results from our current projections, although how different is hard to assess. Some examples of data limitations are:

- Milliman includes a load to its census data as a placeholder for obligations for individuals who are terminated and are vested in a benefit payable in the future. As these individuals come forward and commence there benefits, Milliman trues up their liabilities at that time.
- Generally, there are different gaps in different records due to information being missing for various reasons.

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ı	Paygo for all FP	Paygo for non		Paygo for	Paygo net of	PV factor	PV factor	Total ERS	Paygo net of		PV (3.58%) paygo	P\	/ (3.79%) paygo
Fiscal year en e	entities	fiscal plan entities	Total ERS paygo	municipalities	municipalities	at 3.58%	at 3.79%	paygo	municipalities	PV (3.58%) all paygo	less municipalities	PV (3.79%) all paygo le	ss municipalities
6/30/2019	1,315,286,000	332,793,590	1,648,079,590	183,827,873	1,464,251,718	0.932069	0.928301	1,648,080	1,464,252	1,536,124	1,359,267	1,529,914	1,359,267
6/30/2020	1,407,826,433	332,832,994	1,740,659,428	185,140,185	1,555,519,243	0.899854	0.894403	1,740,659	1,555,519	1,566,340	1,391,262	1,556,852	1,391,262
6/30/2021	1,237,737,035	296,223,403	1,533,960,438	171,435,364	1,362,525,075	0.868753	0.861743	1,533,960	1,362,525	1,332,633	1,174,147	1,321,880	1,174,147
6/30/2022	1,225,133,086	295,890,332	1,521,023,417	171,976,237	1,349,047,180	0.838727	0.830276	1,521,023	1,349,047	1,275,723	1,120,081	1,262,869	1,120,081
6/30/2023	1,212,758,196		1,508,969,991	173,007,297	1,335,962,695		0.799958	1,508,970	1,335,963	1,221,870	1,068,713	1,207,112	1,068,713
6/30/2024	1,203,222,830	296,580,544	1,499,803,374	174,063,785	1,325,739,589	0.781751	0.770746	1,499,803	1,325,740	1,172,473	1,021,809	1,155,968	1,021,809
6/30/2025	1,197,591,609	296,540,593	1,494,132,202	174,809,576	1,319,322,626	0.754732	0.742602	1,494,132	1,319,323	1,127,669	979,731	1,109,545	979,731
6/30/2026	1,203,425,294	297,185,635	1,500,610,929	176,034,031	1,324,576,898		0.715485	1,500,611	1,324,577	1,093,415	947,715	1,073,664	947,715
6/30/2027	1,205,477,460	296,811,761	1,502,289,221	176,702,589	1,325,586,633	0.703462	0.689358	1,502,289	1,325,587	1,056,804	913,804	1,035,615	913,804
6/30/2028	1,205,209,044	296,039,108	1,501,248,152	177,091,010	1,324,157,142	0.679149	0.664185	1,501,248	1,324,157	1,019,571	879,486	997,107	879,486
6/30/2029	1,204,680,361	295,465,950	1,500,146,311	177,709,993	1,322,436,318		0.639932	1,500,146	1,322,436	983,610	846,269	959,992	846,269
6/30/2030	1,201,654,370	294,341,369	1,495,995,738	177,864,560	1,318,131,178		0.616564	1,495,996	1,318,131	946,986	812,713	922,378	812,713
6/30/2031	1,197,480,519	292,939,183	1,490,419,702	177,861,942	1,312,557,759	0.611135	0.59405	1,490,420	1,312,558	910,848	779,725	885,383	779,725
6/30/2032	1,191,691,790	291,204,816	1,482,896,606	177,490,339	1,305,406,267	0.590013	0.572357	1,482,897	1,305,406	874,928	747,159	848,747	747,159
6/30/2033	1,182,921,238	288,866,579	1,471,787,818	176,777,362	1,295,010,456	0.56962	0.551457	1,471,788	1,295,010	838,360	714,143	811,628	714,143
6/30/2034	1,171,837,705	285,655,312	1,457,493,017	175,447,051	1,282,045,966	0.549933	0.53132	1,457,493	1,282,046	801,523	681,177	774,395	681,177
6/30/2035	1,159,071,407	282,183,816	1,441,255,223	174,120,377	1,267,134,846	0.530926	0.511918	1,441,255	1,267,135	765,199	648,670	737,805	648,670
6/30/2036	1,142,788,702	277,729,500	1,420,518,202	172,069,440	1,248,448,762	0.512575	0.493225	1,420,518	1,248,449	728,123	615,766	700,635	615,766
6/30/2037	1,123,337,923	272,398,640	1,395,736,563	169,684,597	1,226,051,966	0.494859	0.475215	1,395,737	1,226,052	690,693	582,638	663,274	582,638
6/30/2038	1,100,976,939	266,592,984	1,367,569,923	167,000,389	1,200,569,534	0.477756	0.457862	1,367,570	1,200,570	653,364	549,695	626,158	549,695
6/30/2039	1,073,963,281	259,632,630	1,333,595,911	163,536,588	1,170,059,322	0.461243	0.441142	1,333,596	1,170,059	615,112	516,163	588,306	516,163
6/30/2040	1,043,690,778	251,996,981	1,295,687,758	159,625,156	1,136,062,603	0.445301	0.425034	1,295,688	1,136,063	576,972	482,865	550,711	482,865
6/30/2041	1,011,255,076	243,859,381	1,255,114,457	155,300,935	1,099,813,522	0.429911	0.409513	1,255,114	1,099,814	539,587	450,388	513,986	450,388
6/30/2042	975,654,954	234,923,464	1,210,578,419	150,320,687	1,060,257,731	0.415052	0.394559	1,210,578	1,060,258	502,453	418,334	477,645	418,334
6/30/2043	937,841,545	225,676,430	1,163,517,975	145,086,536	1,018,431,439		0.380151	1,163,518	1,018,431	466,229	387,158	442,313	387,158
6/30/2044	899,034,935	216,419,175	1,115,454,110	139,787,271	975,666,838	0.386857	0.36627	1,115,454	975,667	431,521	357,357	408,557	357,357
6/30/2045	858,138,207	206,544,474	1,064,682,681	133,996,095	930,686,586	0.373486	0.352895	1,064,683	930,687	397,644	328,435	375,721	328,435
6/30/2046	816,813,708	196,649,221	1,013,462,929	128,233,369	885,229,559	0.360578	0.340009	1,013,463	885,230	365,432	300,986	344,586	300,986
6/30/2047	775,046,926	186,670,892	961,717,818	122,360,559	839,357,258	0.348115	0.327593	961,718	839,357	334,788	274,968	315,052	274,968
6/30/2048	733,333,610		909,846,280	116,396,356	793,449,924		0.315631	909,846	793,450	305,784	250,437	287,175	250,437
6/30/2049	690,831,940	166,207,116	857,039,056	110,236,460	746,802,596		0.304105	857,039	746,803	278,081	227,106	260,630	227,106
6/30/2050	649,202,176	156,262,754	805,464,931	104,290,781	701,174,150	0.313253	0.293	805,465	701,174	252,314	205,444	236,001	205,444
6/30/2051	607,454,923		753,681,988	98,257,890	655,424,098	0.302426	0.282301	753,682	655,424	227,933	185,027	212,765	185,027
6/30/2052	566,714,137	135,838,480	702,552,617	91,747,255	610,805,362	0.291973	0.271993	702,553	610,805	205,127	166,135	191,089	166,135
6/30/2053	527,663,013	126,190,267	653,853,280	85,776,326	568,076,954	0.281882	0.262061	653,853	568,077	184,309	148,871	171,349	148,871
6/30/2054	489,528,631		606,251,587	79,858,067	526,393,520		0.252491	606,252	526,394	164,985	132,910	153,073	132,910
6/30/2055	452,820,996	107,605,845	560,426,842	74,112,813	486,314,029		0.243271	560,427	486,314	147,243	118,306	136,336	118,306
6/30/2056	417,787,104	98,915,158	516,702,262	68,572,353	448,129,909	0.253653	0.234388	516,702	448,130	131,063	105,036	121,109	105,036
6/30/2057	384,179,103		474,682,439	63,212,246	411,470,193		0.225829	474,682	411,470	116,243	92,922	107,197	92,922
6/30/2058	352,216,806	82,576,210	434,793,016	58,120,052	376,672,963	0.236422	0.217583	434,793	376,673	102,795	81,957	94,603	81,957
Total	38,353,279,790	9,310,422,409	47,663,702,199	5,758,941,792	41,904,760,407			47,663,701	41,904,763	26,941,871	23,064,775	26,169,125	23,064,775